

IN THE SPECIFICATION:

Please amend the specification as follows:

Paragraph beginning on page 4, at prenumbered line 10, has been amended as follows:

Figure 2 illustrates a flowchart of a method for adjusting the transmission rate according to the first embodiment of the present invention. In the first embodiment, the transmission rate of the communication system is adjusted automatically according to the re-transmitting mechanism described previously. The method of the first embodiment comprises the following steps: in step 202, an initial transmission rate is set. Next, in step 204, a data packet is transmitted at a set transmission rate, which in this case is the initial transmission rate, within a predetermined time interval. The predetermined time interval can be defined by a clock signal of the communication system, the number of packets being transmitted, or the number of packets being successfully transmitted. Also, if the communication environment varies frequently, e.g. the user is moving constantly, then the predetermined time interval tends to be short. In step 206, a successful transmission ratio of the data packet within the predetermined time interval is calculated. The successful transmission ratio is defined as the number of received acknowledgment packets divided by the total number of packets being transmitted by the transmitter. The successful transmission ratio represents an effective transmission rate. Therefore, the successful transmission ratio represents the transmission efficiency of the communication system. Next, in step 208, the calculated successful transmission ratio within the predetermined time interval is compared to a first successful threshold, which is predetermined to be a criterion for increment. If the successful transmission ratio is greater than the first successful threshold (step 208) and the current transmission rate is the highest transmission rate of the communication system (step 210), the next transmission rate maintains the value of the current transmission rate. If the successful transmission ratio is greater than the first successful threshold (step 208) and the current transmission rate is not the highest transmission rate of the communication system (step 210), the next transmission rate is increased to be a higher value than the current

transmission rate (step 212). In contrast, if the successful transmission ratio is lower than the first successful threshold, it indicates that the current ~~throughout~~ throughput is not desirable. Therefore, the system ~~throughout~~ throughput can potentially be improved if the packets are transmitted at a lower transmission rate. In this situation, if the current transmission rate is the lowest transmission rate of the system, the next transmission rate maintains the value of the current transmission rate. If the current transmission rate is not the lowest transmission rate of the system, the next transmission rate is reduced to be a lower value than the current transmission rate (step 216).